

FIG. 1

FIG. 2

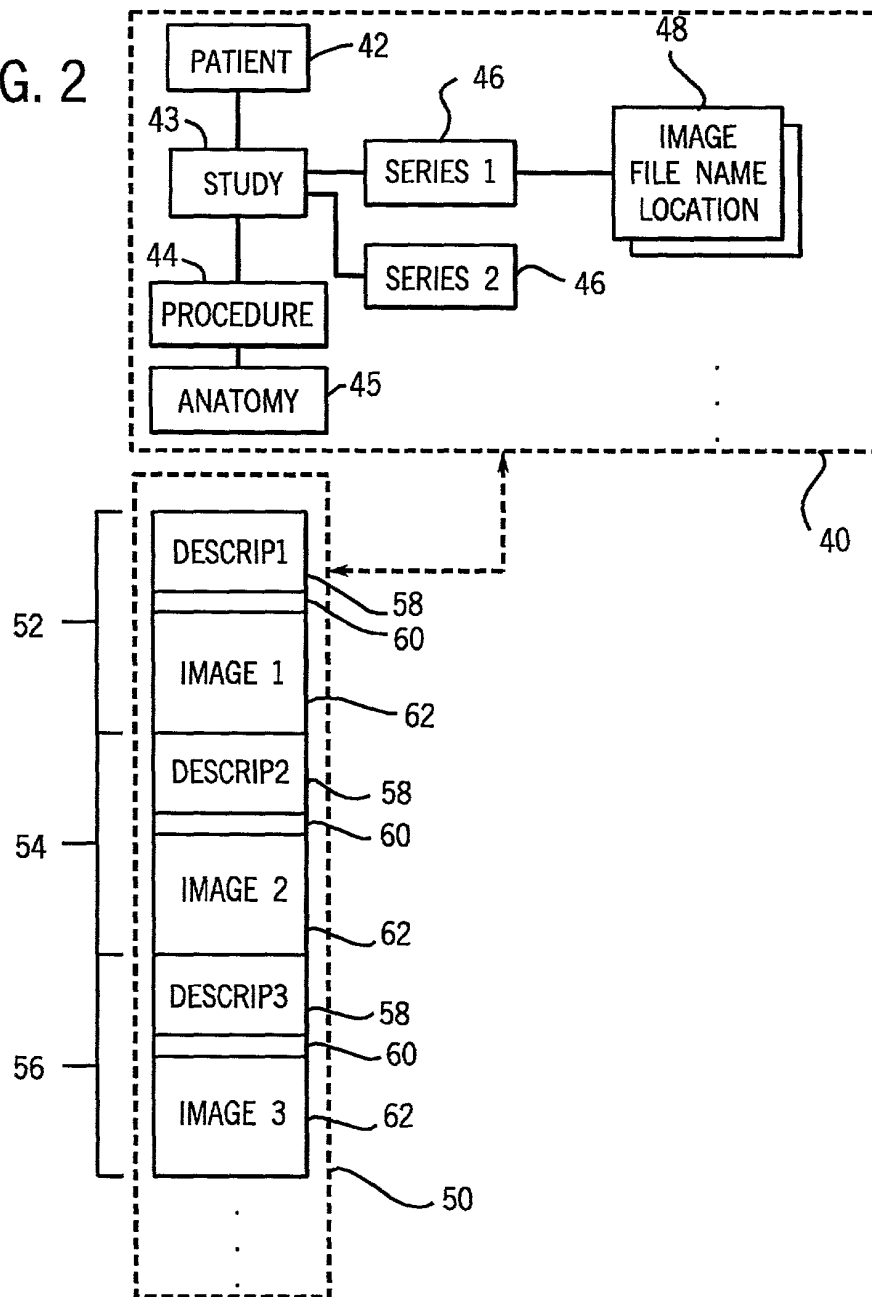
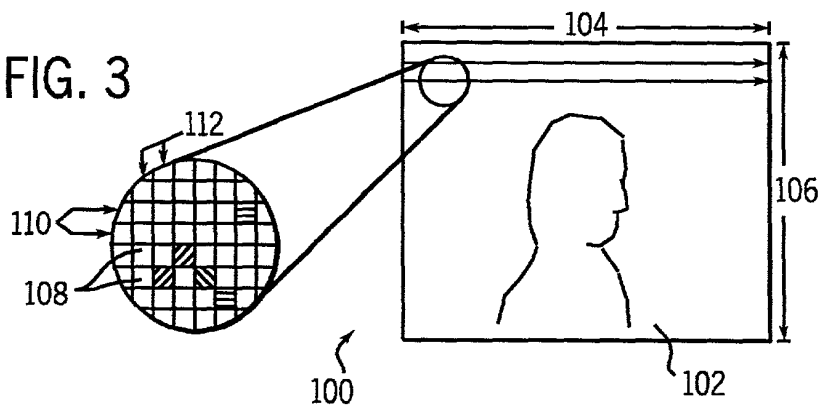
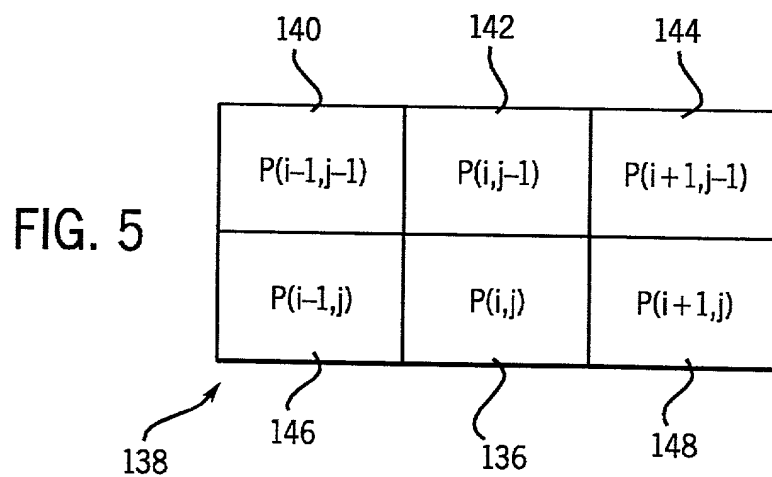
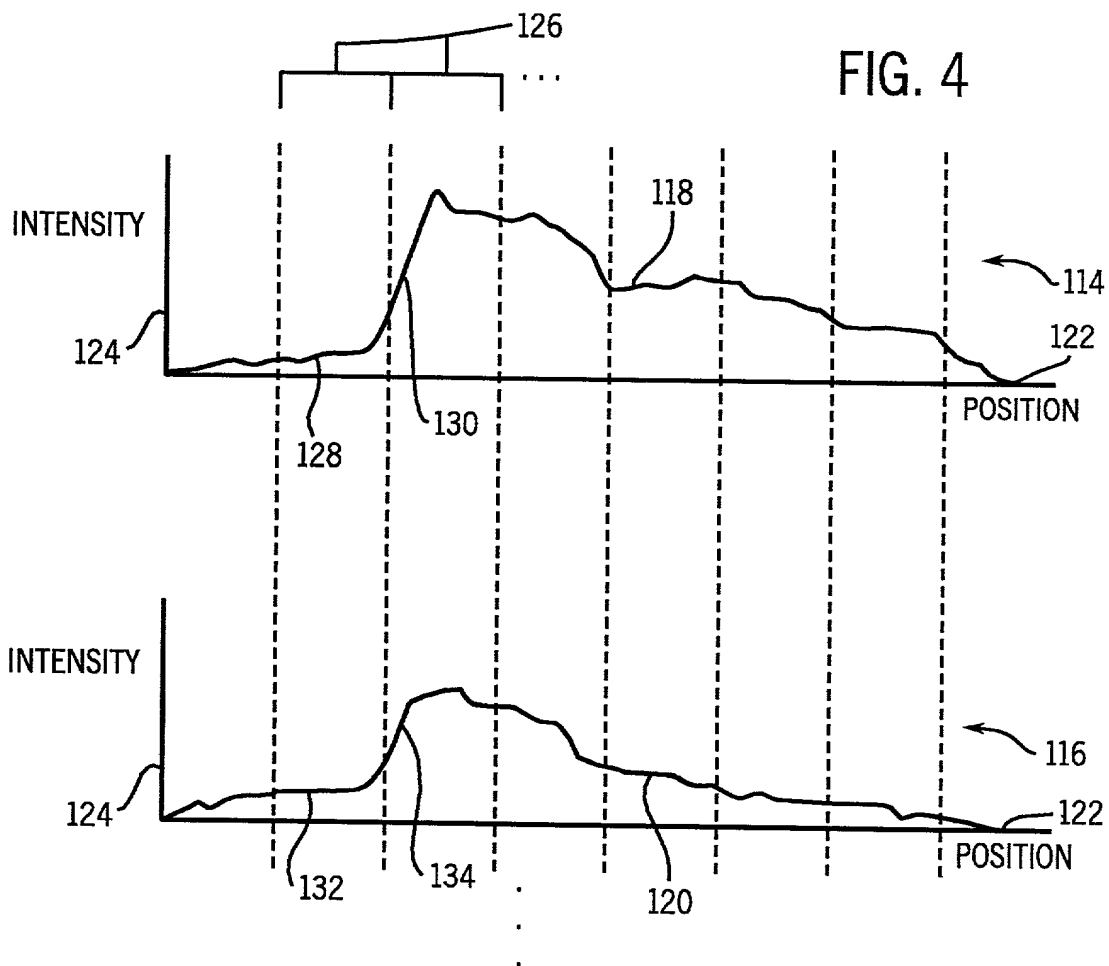


FIG. 3





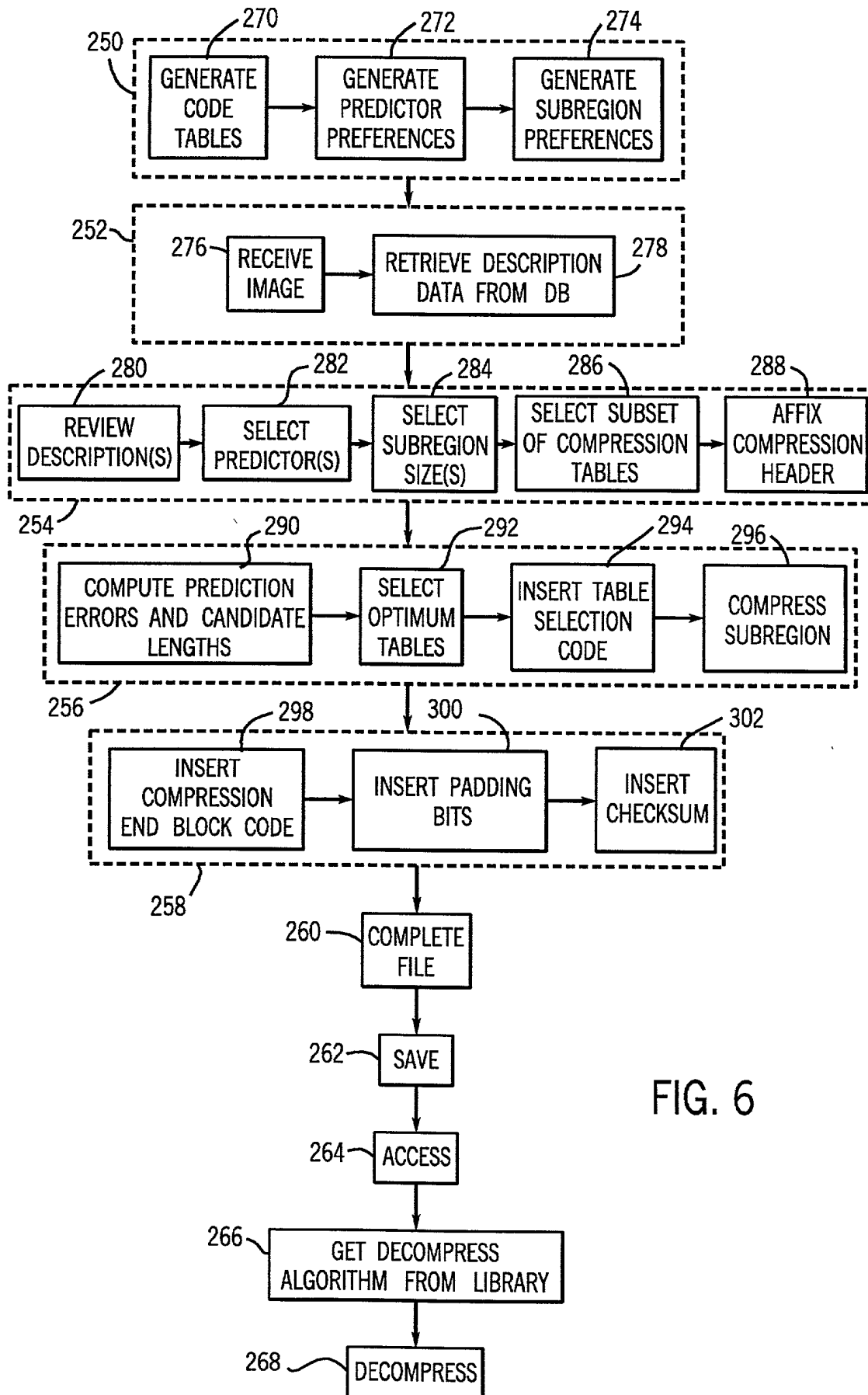


FIG. 6

16 - BIT LOSSLESS ENCODING
SCHEME 0 - MAX RATIO = 16:1

FIG. 7

HUFFMAN CODE PREFIX	CODE EXTENSION	DIFFERENCE d	CODE LENGTH	ENCODED RANGE WIDTH
180 0		0	1	0
100		+1	3	+1
101		-1	3	
1100	X	+2 TO +3	5	+2
1101	X	-2 TO -3	5	
11100	XX	+4 TO +7	7	+4
11101	XX	-4 TO -7	7	
111100	XXX	+8 TO +15	9	+8
111101	XXX	-8 TO -15	9	
1111100	XXXX	+16 TO +31	11	+16
1111101	XXXX	-16 TO -31	11	
11111100	XXXXX	+32 TO +63	13	+32
11111101	XXXXX	-32 TO -61	13	
111111100	XXXXXX	+64 TO +127	15	+64
111111101	XXXXXX	-64 TO -127	15	
1111111100	XXXXXXX	+128 TO +255	17	+128
1111111101	XXXXXXX	-128 TO -255	17	
11111111100	XXXXXXXX	+256 TO +511	19	+256
11111111101	XXXXXXXX	-256 TO -511	19	
11111111110 <16 BITS)		ACTUAL VALUE	27	
11111111111		END OF BLOCK	11	

172 174 176 178 170

SCHEME 1 - MAX RATIO = 5.33:1

FIG. 8

HUFFMAN CODE PREFIX	CODE EXTENSION	DIFFERENCE d	CODE LENGTH	ENCODED RANGE WIDTH
00	X	0 TO +1	3	1
01	X	-1 TO -2	3	
100	XX	+2 TO +5	5	+4
101	XX	-3 TO -6	5	
1100	XXX	+6 TO +13	7	+8
1101	XXX	-7 TO -14	7	
11100	XXXX	+14 TO +29	9	+16
11101	XXXX	-15 TO -30	9	
111100	XXXXX	+30 TO +61	11	+32
111101	XXXXX	-31 TO -62	11	
1111100	XXXXXX	+62 TO +125	13	+64
1111101	XXXXXX	-63 TO -126	13	
11111100	XXXXXXX	+126 TO +253	15	+128
11111101	XXXXXXX	-127 TO -254	15	
111111100	XXXXXXXX	+254 TO +509	17	+256
111111101	XXXXXXXX	-255 TO -510	17	
1111111100	XXXXXXXXX	+510 TO +1021	19	+512
1111111101	XXXXXXXXX	-511 TO -1022	19	
1111111110 <16 BITS)		ACTUAL VALUE	26	
11111111111		END OF BLOCK	10	

184

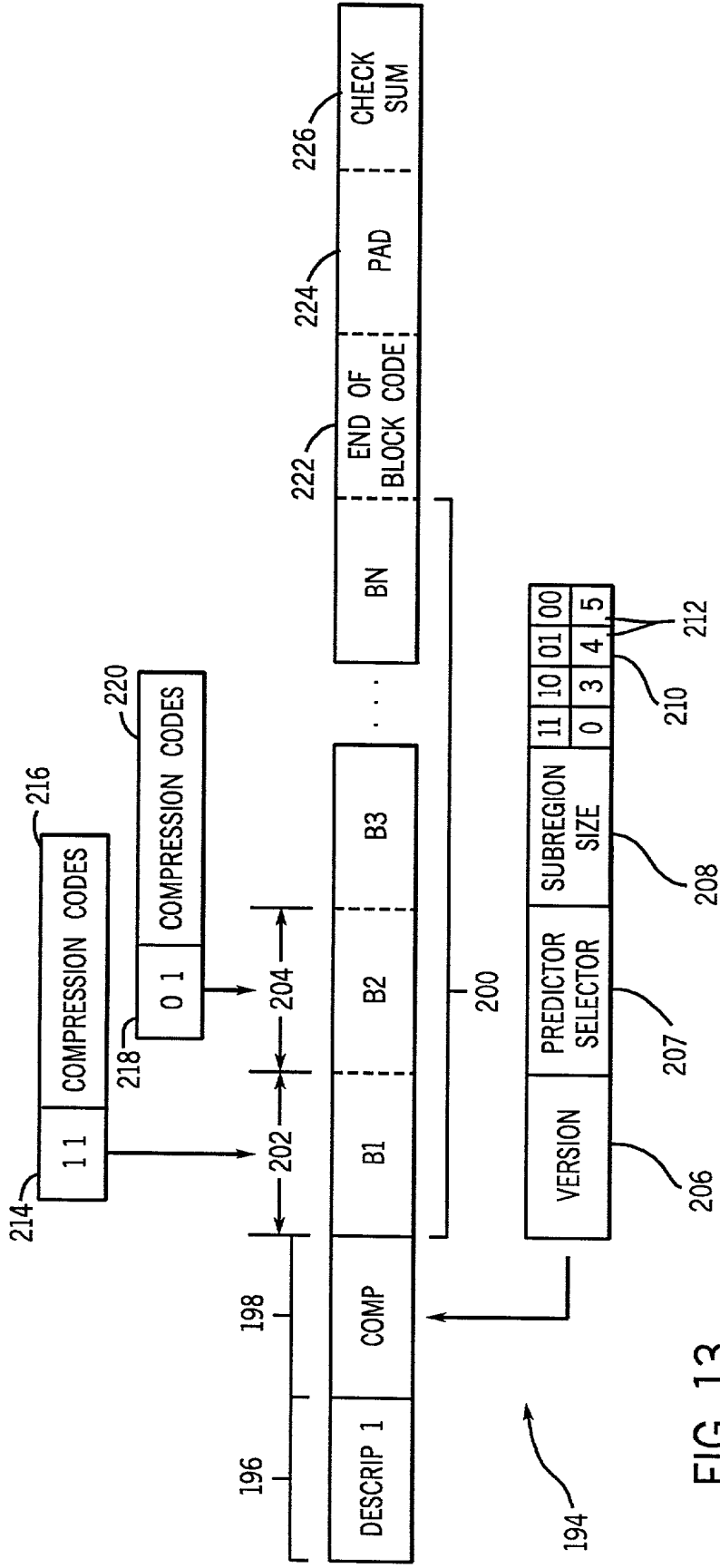


FIG. 13

FIG. 14

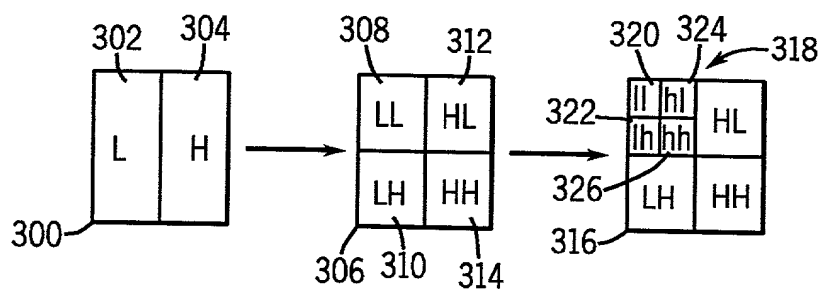
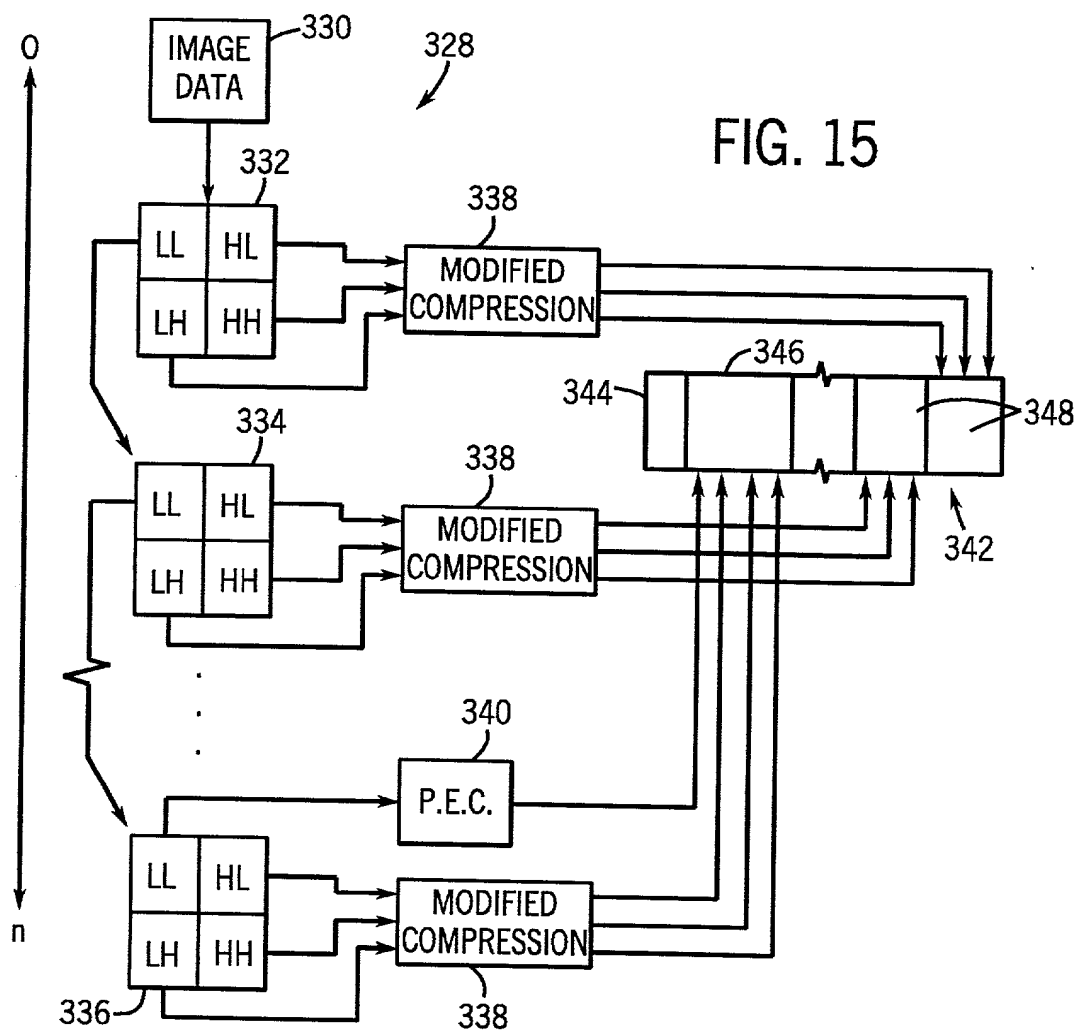


FIG. 15



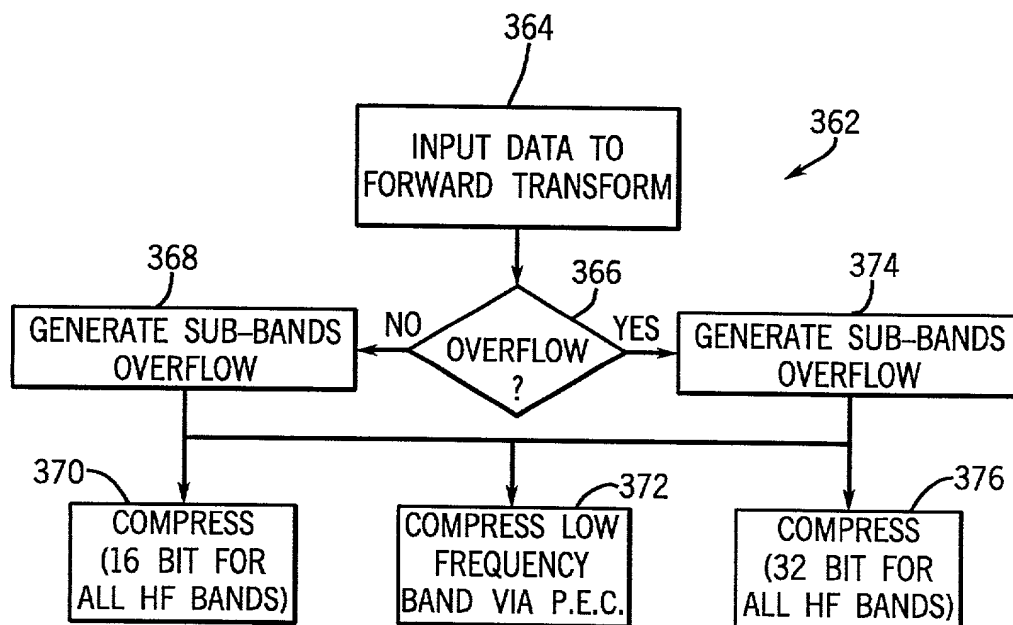
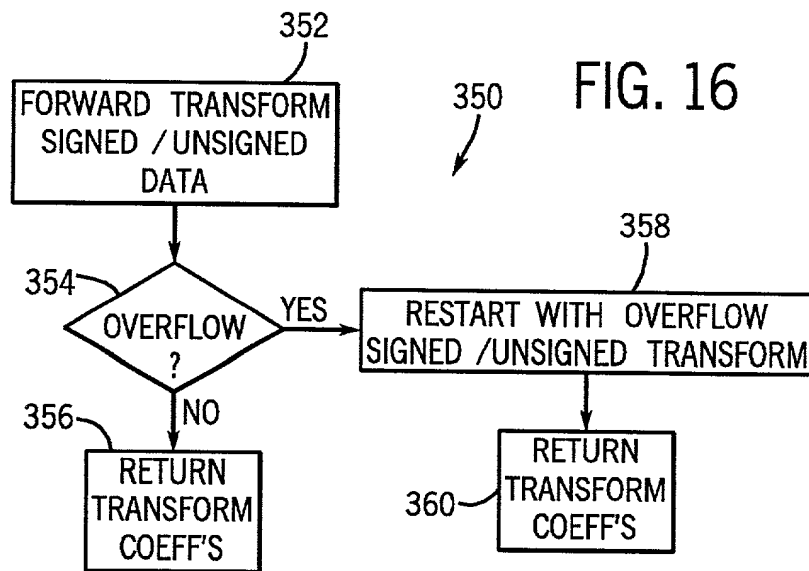


FIG. 17

FIG. 18

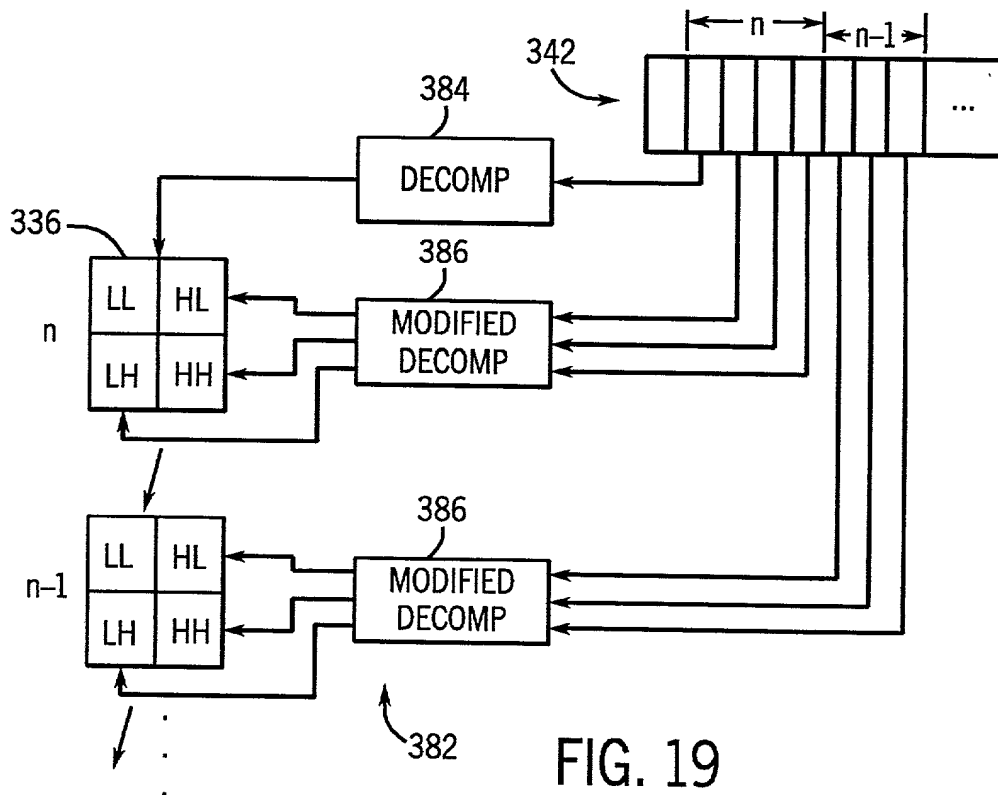
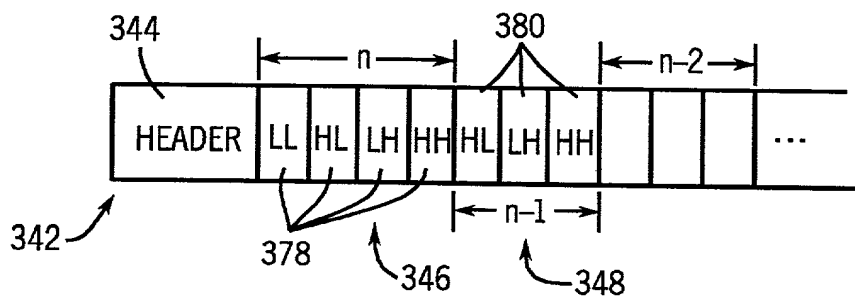
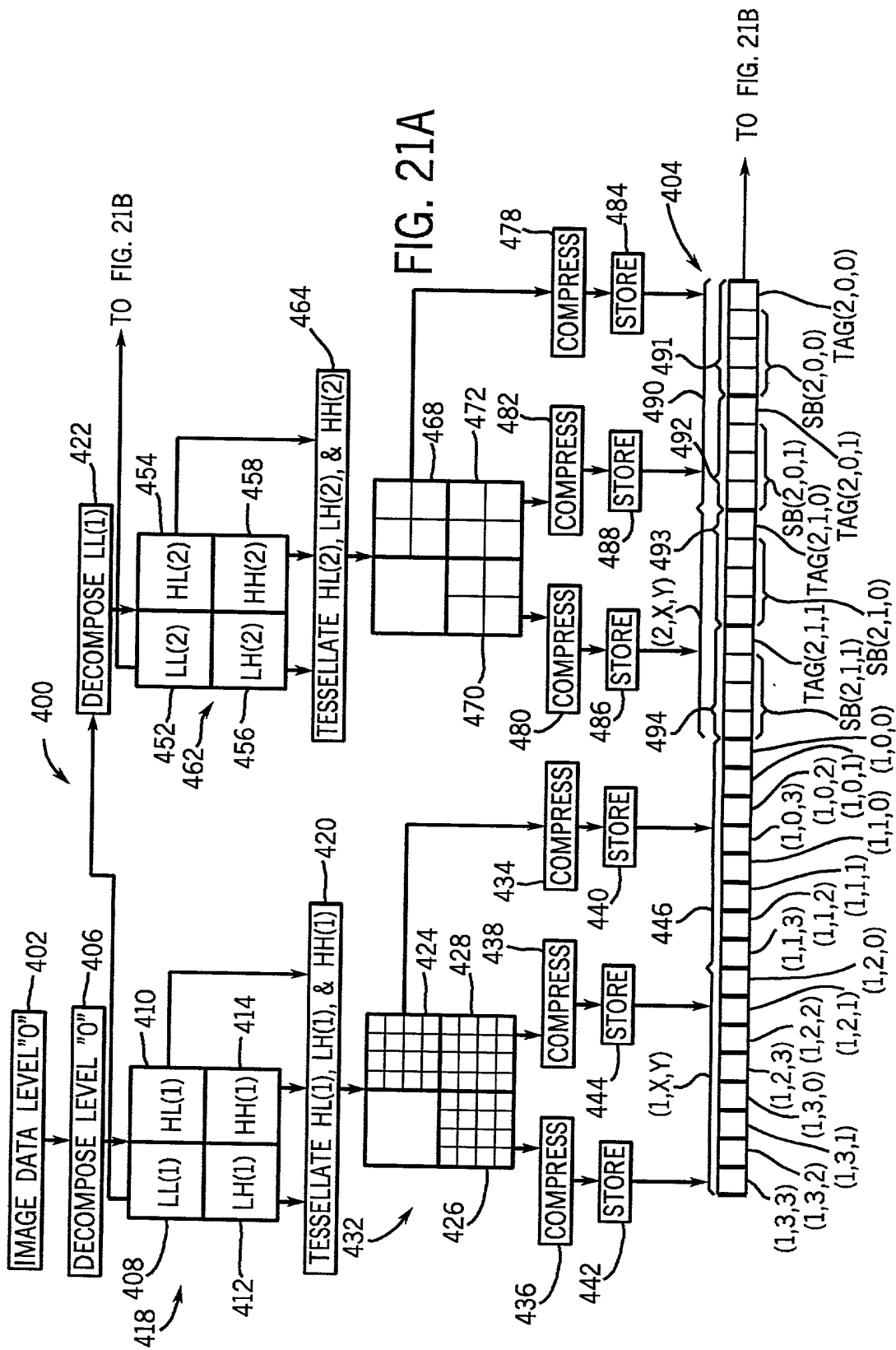


FIG. 19

FIG. 20

LEVEL	ROWS	COLS	COMPRESSED BYTES	EFF COMP RATIO
5	64	79	5652	1811:1
4	128	157	13780	526:1
3	256	313	49868	147:1
2	512	625	186128	40:1
1	1024	1250	724560	10:1
0	2048	2500	2929860	2.6:1



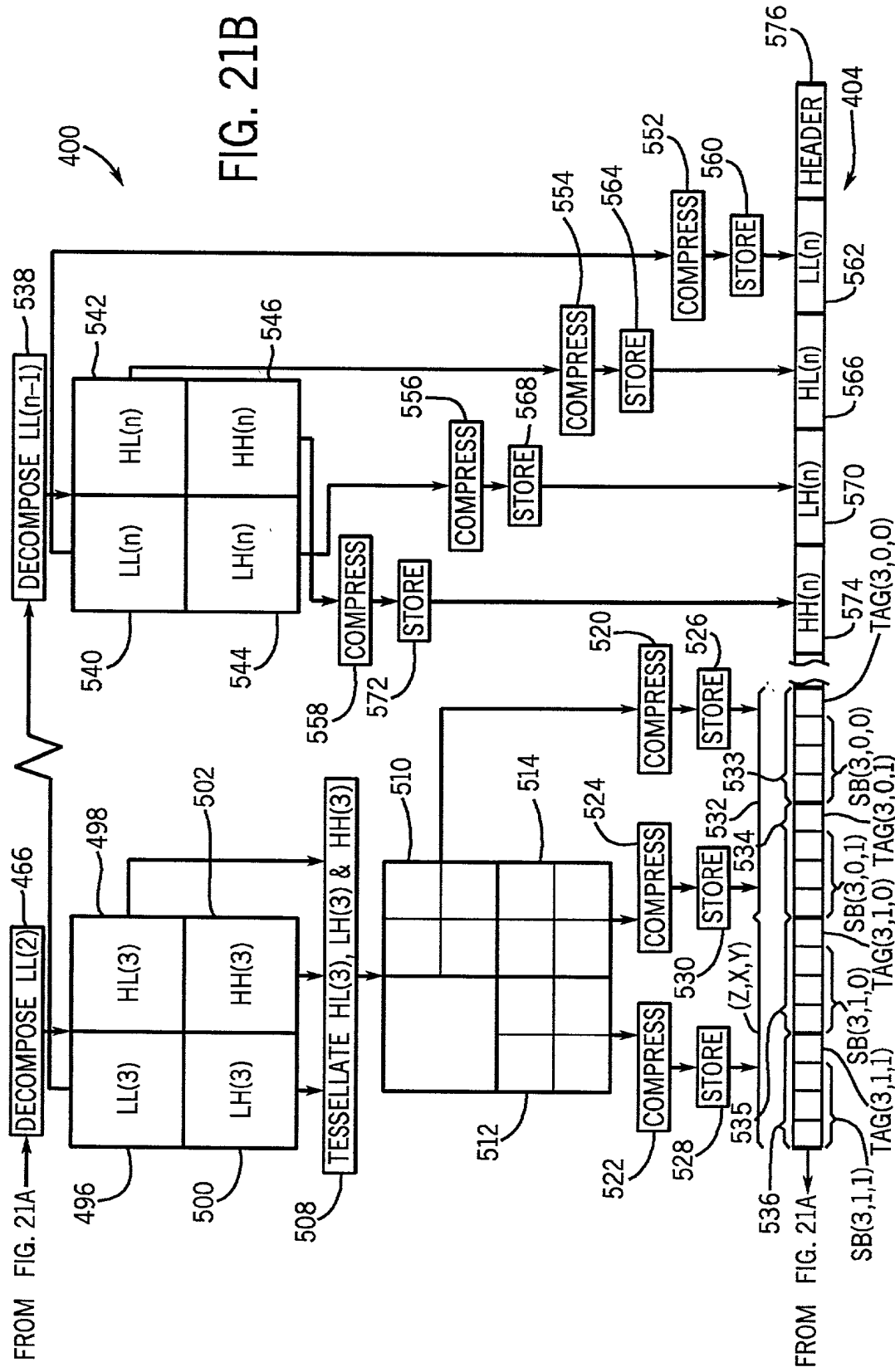
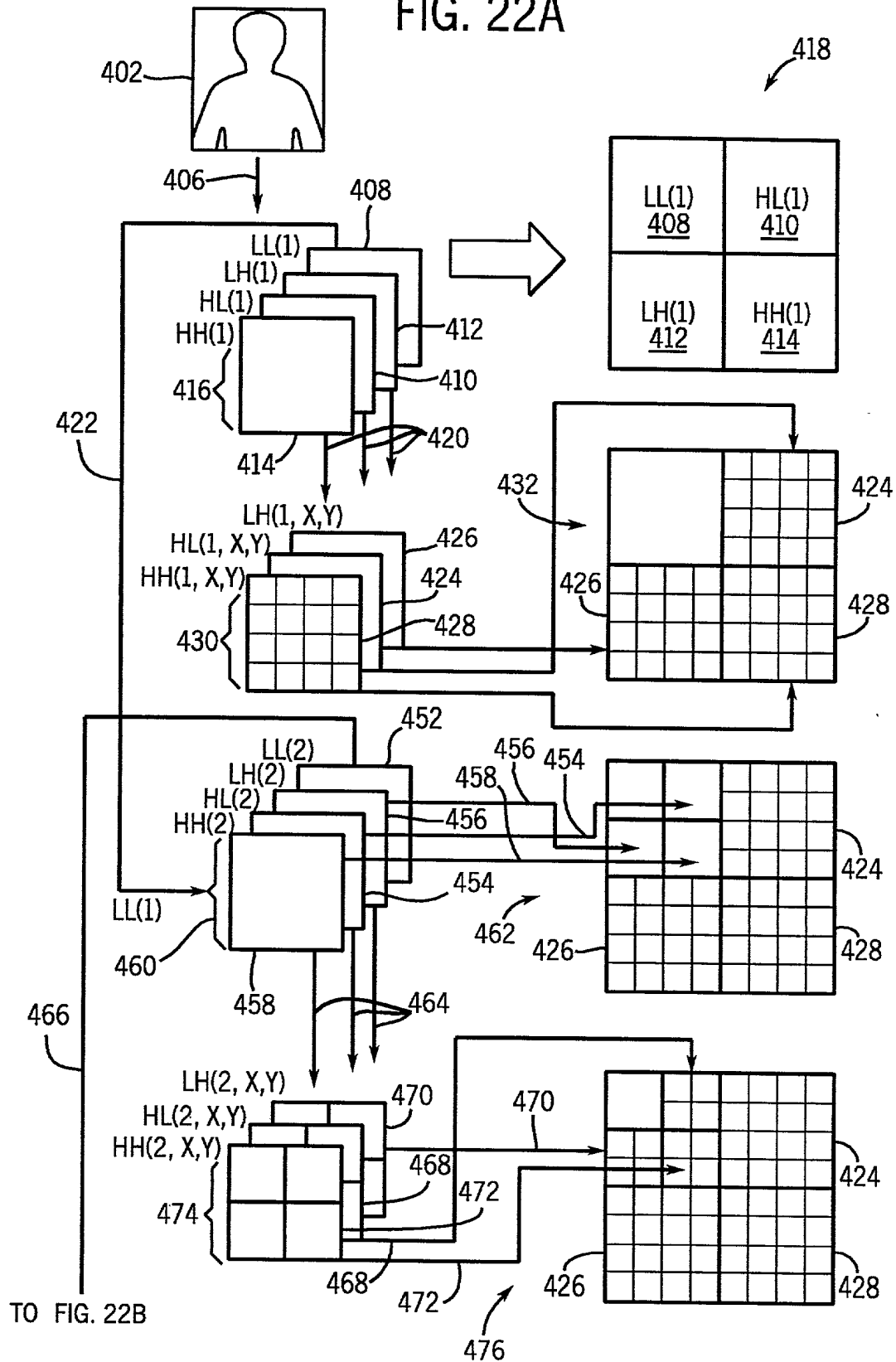


IMAGE RECONSTRUCTION

DATA MAP

FIG. 22A



FROM FIG. 22A

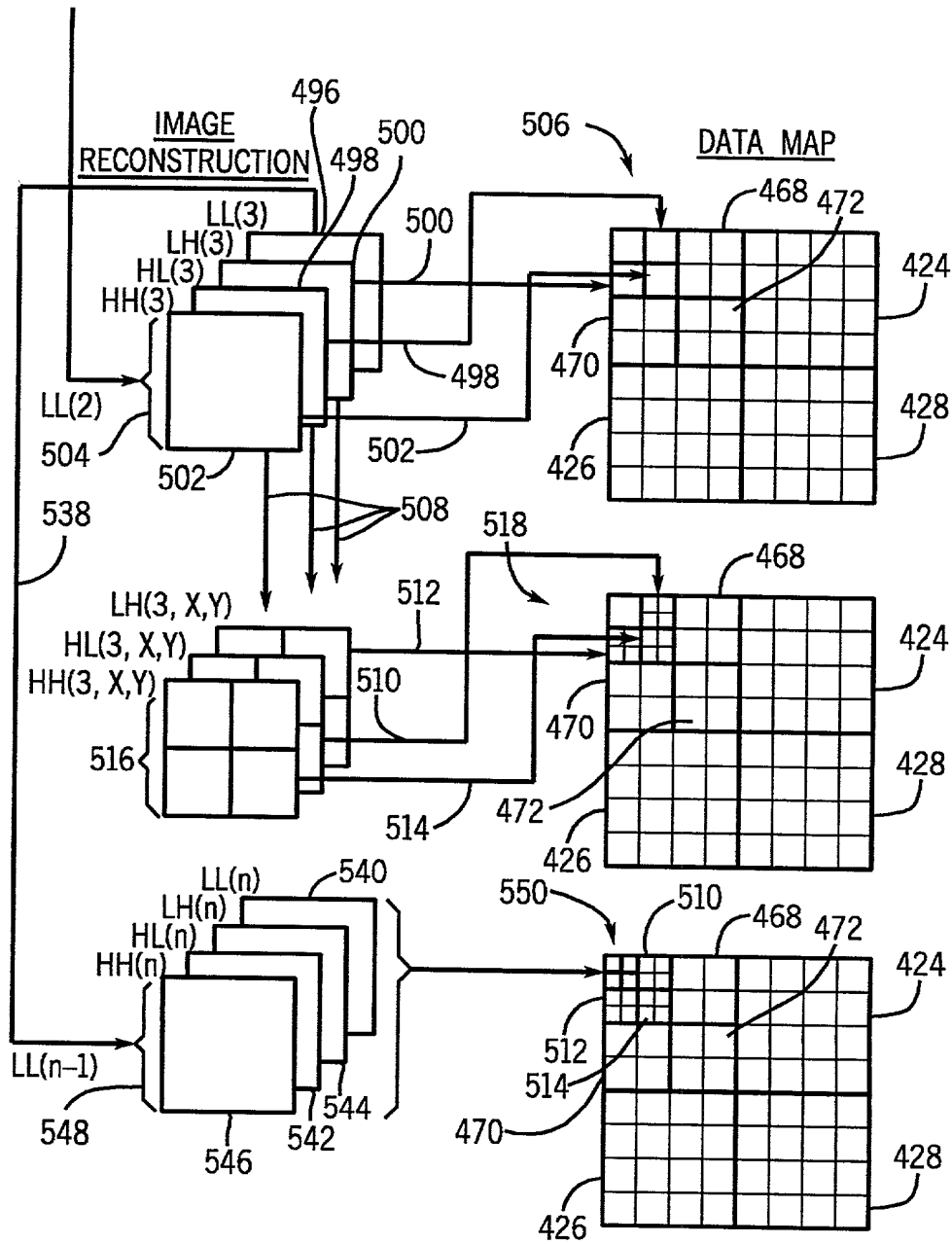


FIG. 22B

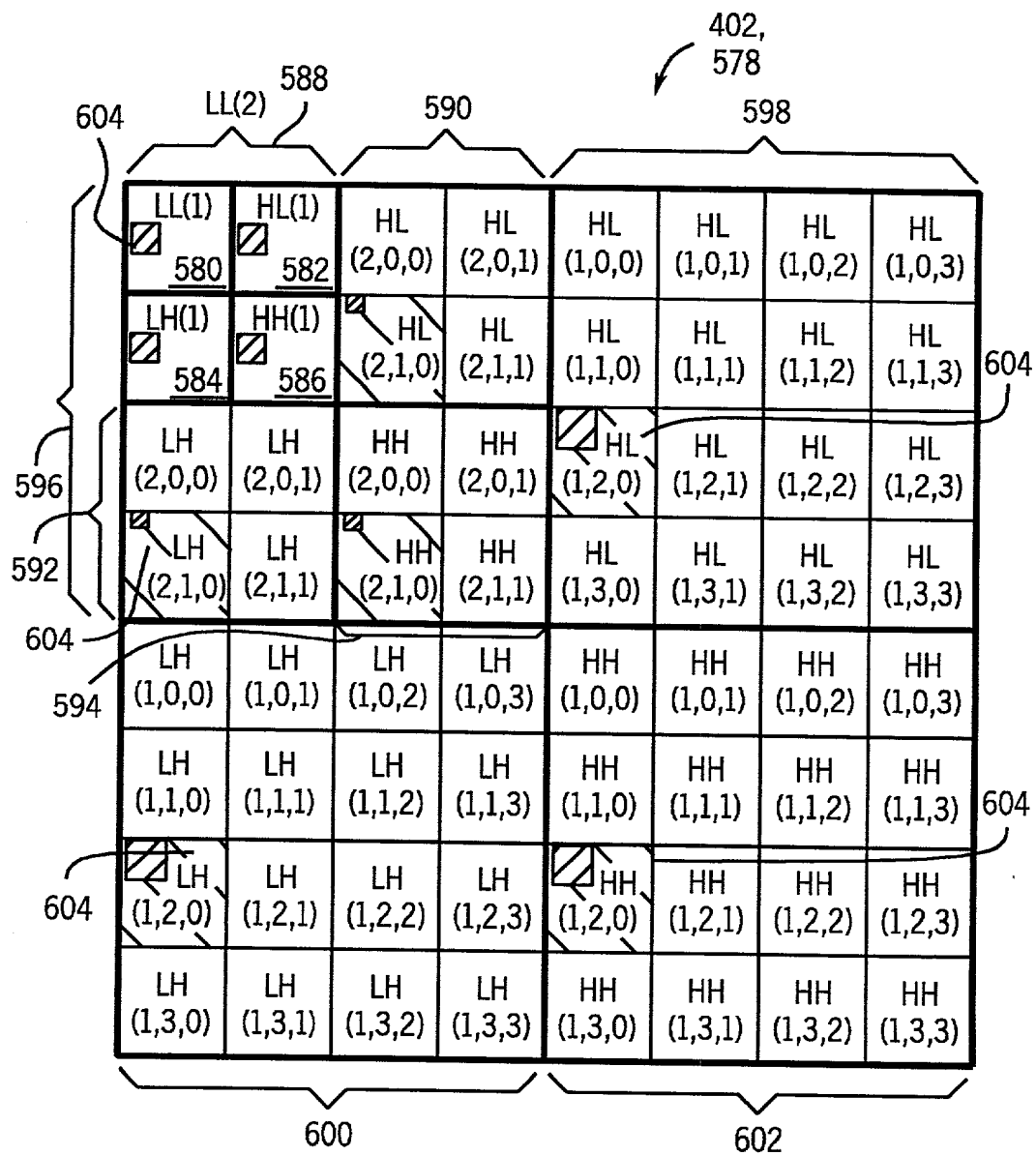
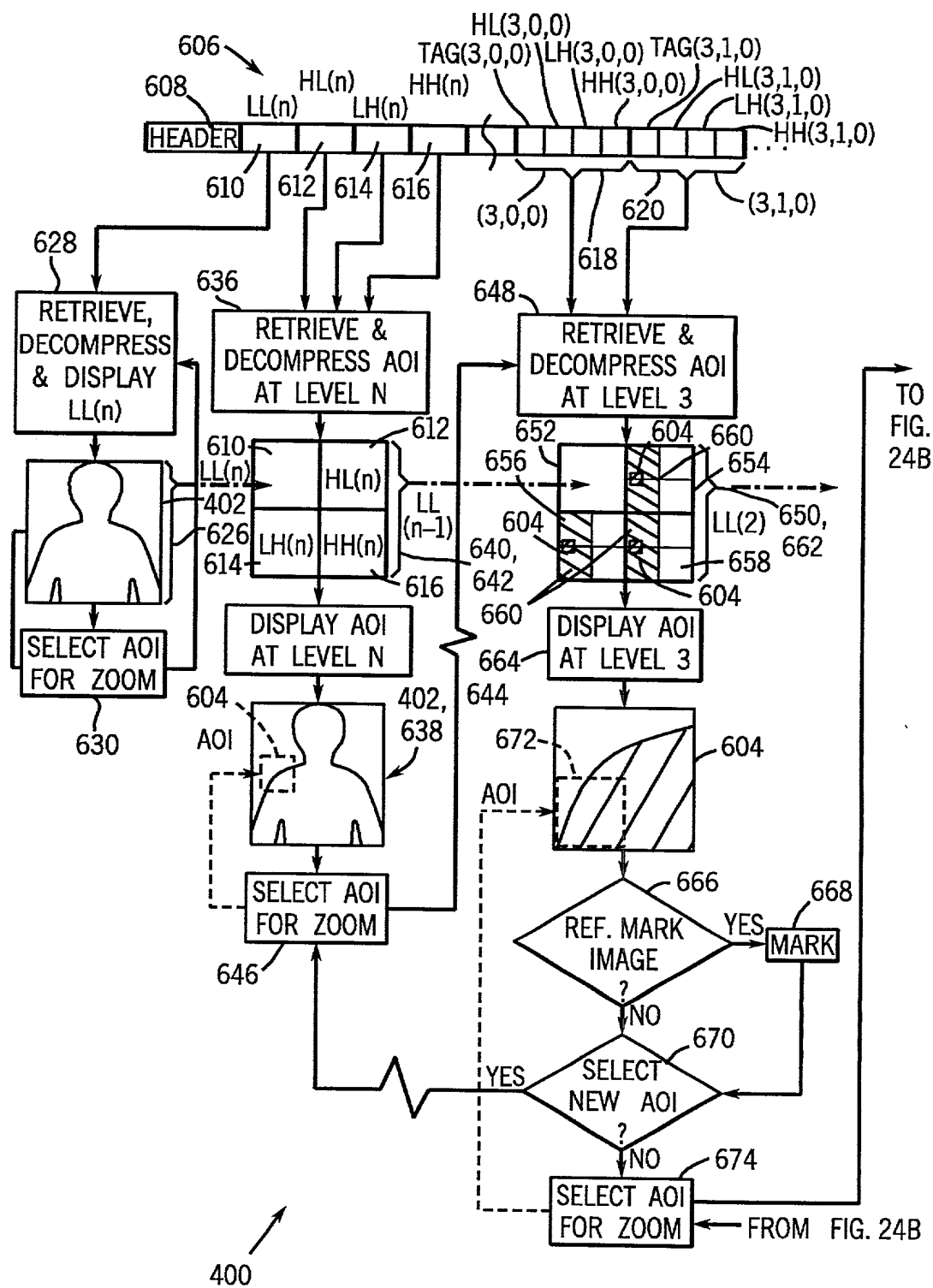


FIG. 23



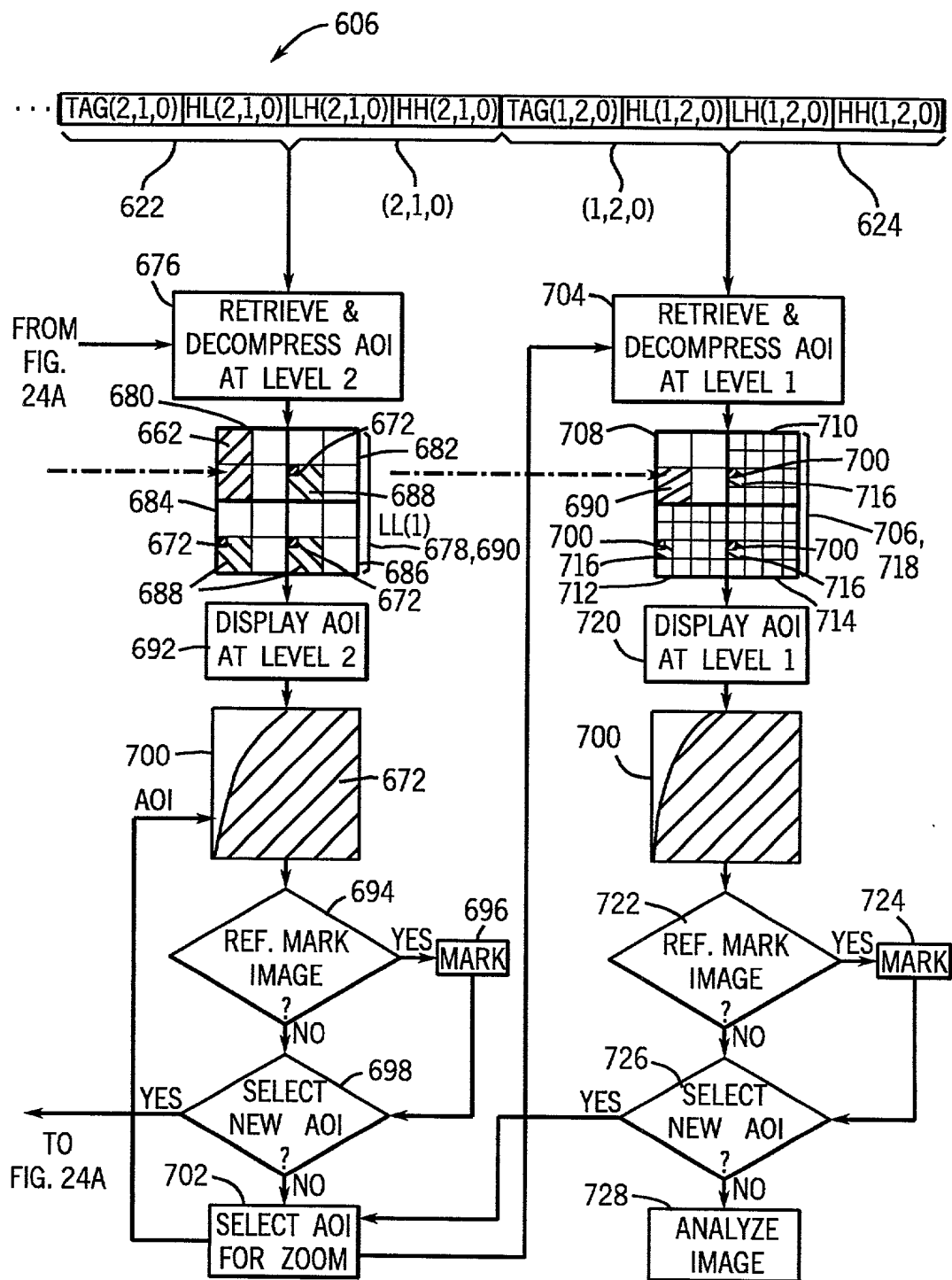


FIG. 24B

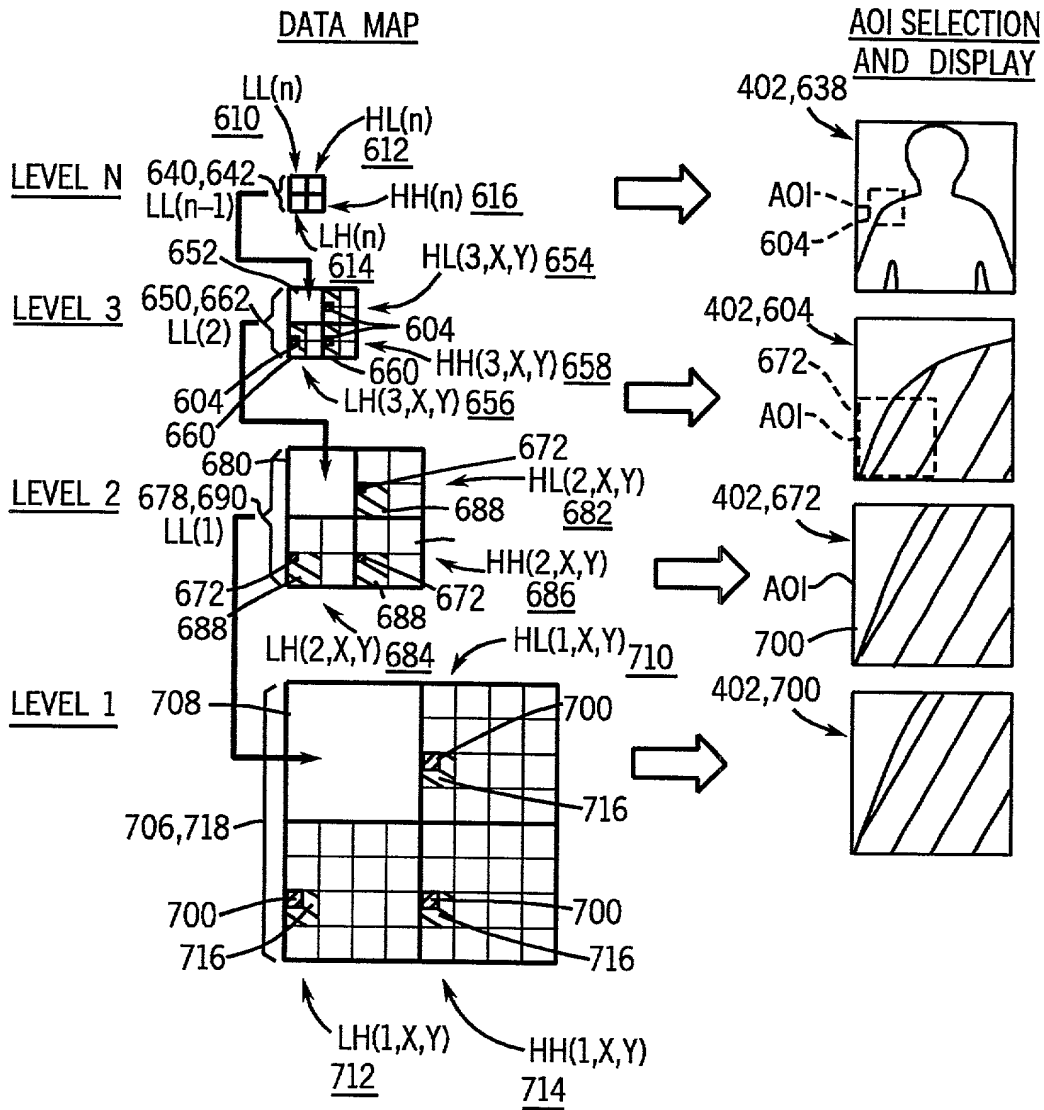
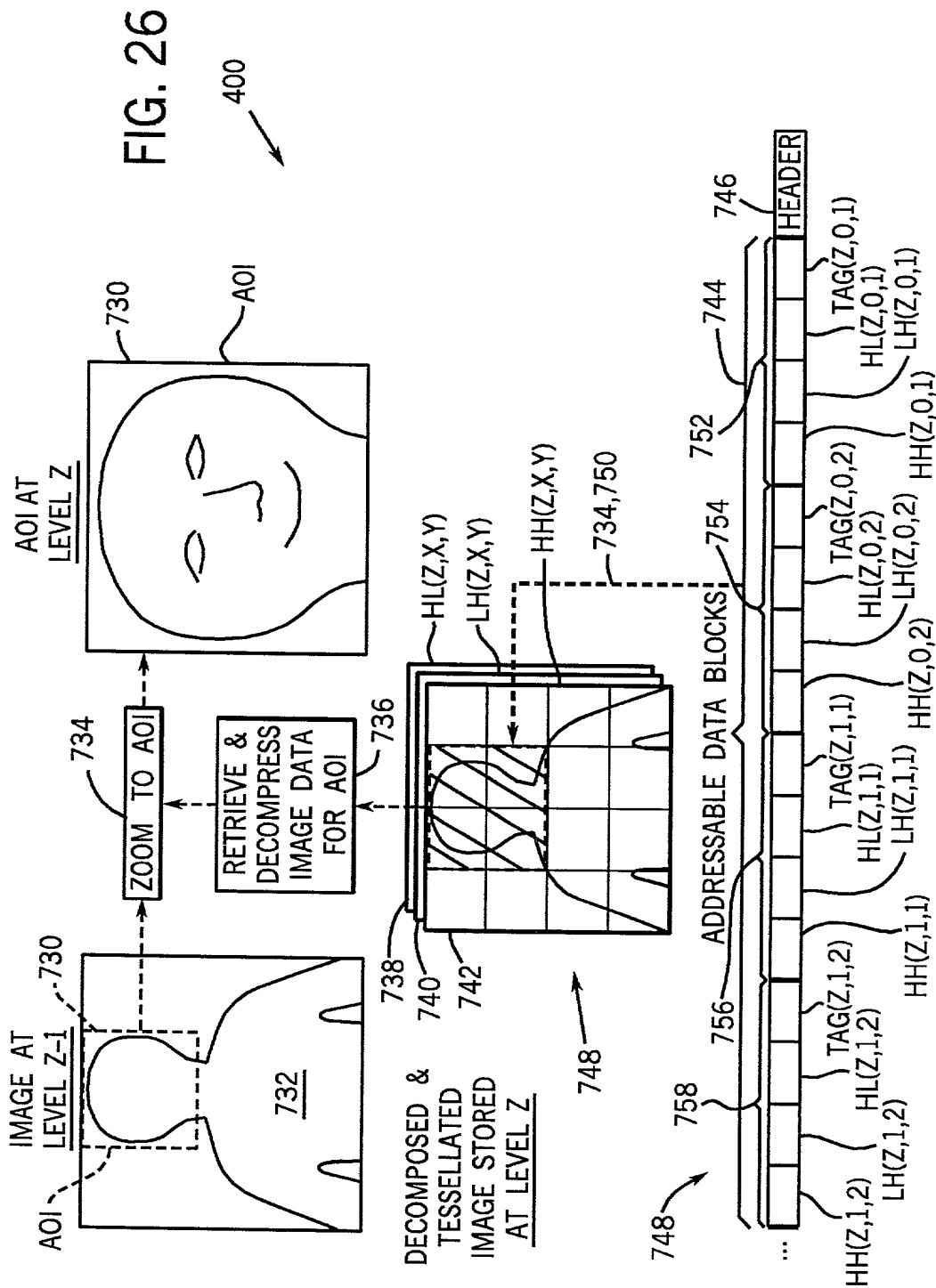


FIG. 25



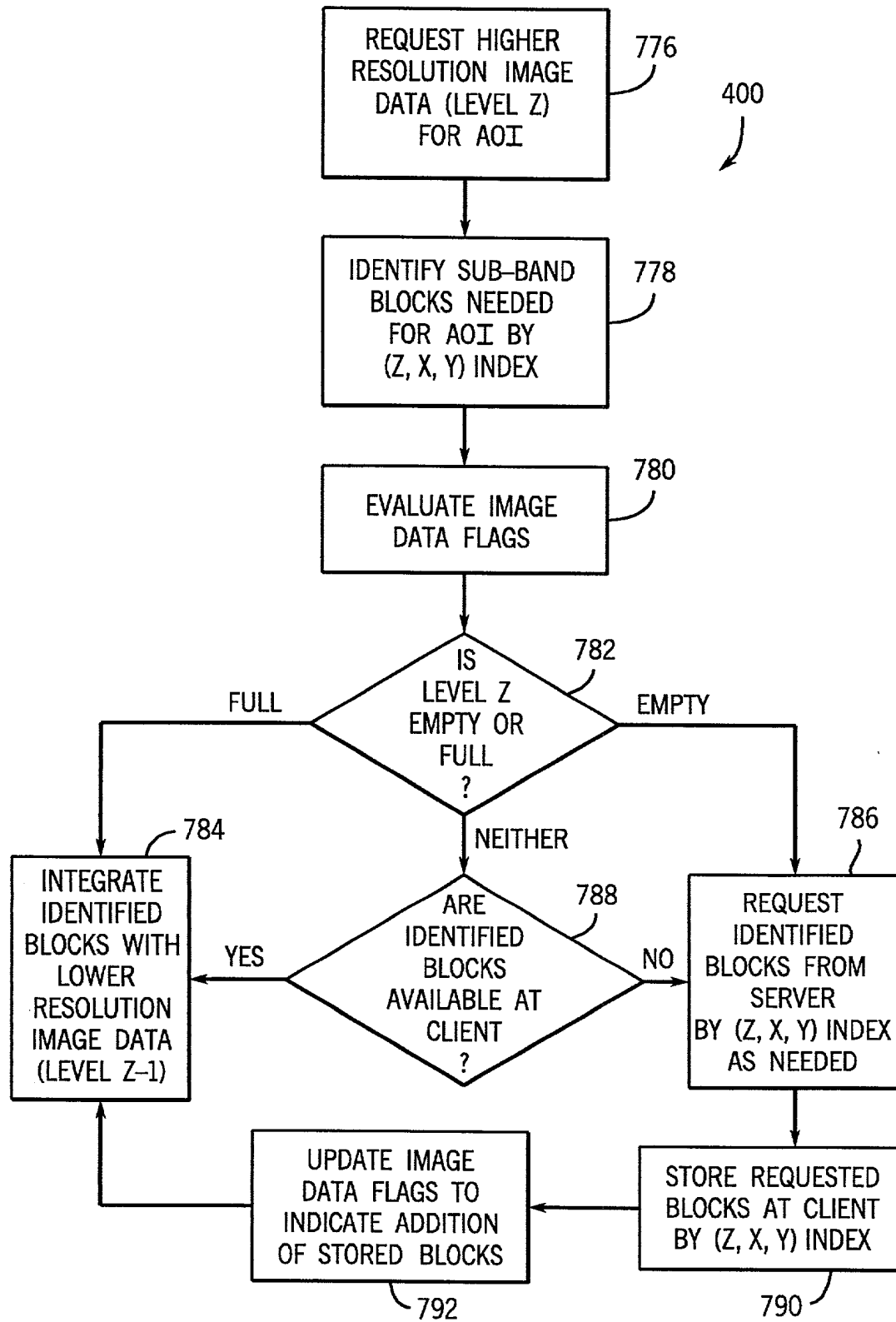


FIG. 27